Community Power Corporation

Energy Systems for Sustainable Development

Small Modular Biopower Systems: A New Option For Distributed Generation Applications in the United States

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Community Power Corporation

Energy Systems for Sustainable Development

Dedicated to Providing Environmentally Friendly Power Systems for Electrification of Rural Communities and Distributed Generation Applications Throughout the World

CPC

WORLD'S FIRST COMPANY
FOCUSED ON THE DEVELOPMENT OF
ENVIRONMENTLY FRIENDLY TECHNOLOGIES
TO IMPROVE THE QUALITY OF LIFE
IN RURAL COMMUNITIES

CPC Makes Renewable Energy Technologies Work for People

CPC's Product Development Facility

Littleton, Colorado

Community Power Corporation's Facilities

CPC's Product Testing & Development Facility 8420 S. Continental Divide Rd. Littleton, Co 80127 www.gocpc.com

CPC's Biopower System Test Center

Dr. Tom Reed

SMB Data Acquisition & Controls

CPC's Electronic Design and Test Center

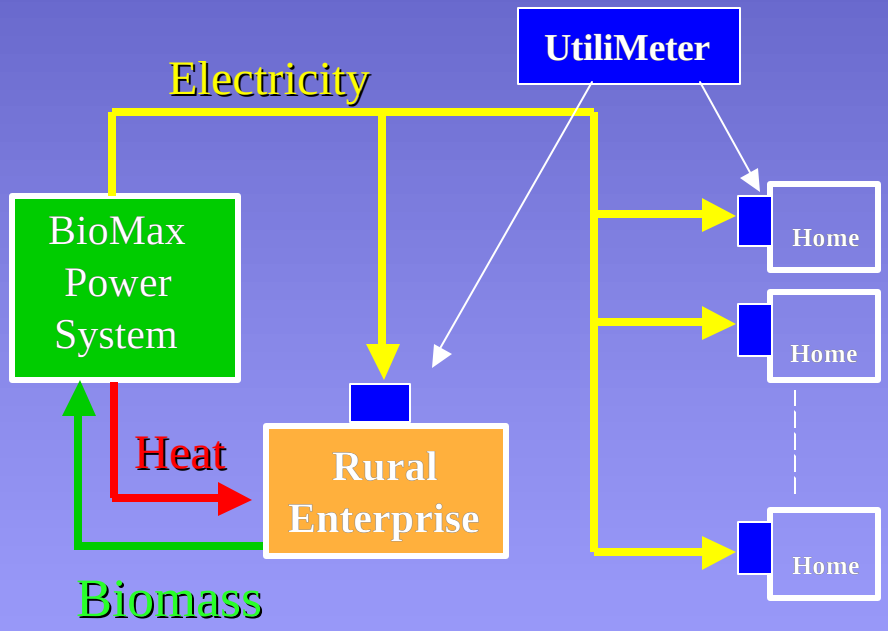
CPC's On-site, Metal Fabrication Facility

SMB Gas and Exhaust Analyzers

CPC Is Developing Two Revolutionary Products

BioMax™

Small Modular Biopower System



UtiliMeter™

Electronic Pre-payment
Dispenser of Electricity, etc.

CPC's Team to Develop BioMax

NREL (DOE)

- ✓ Cost-share funding
- ✓ Expertise

Shell Renewables

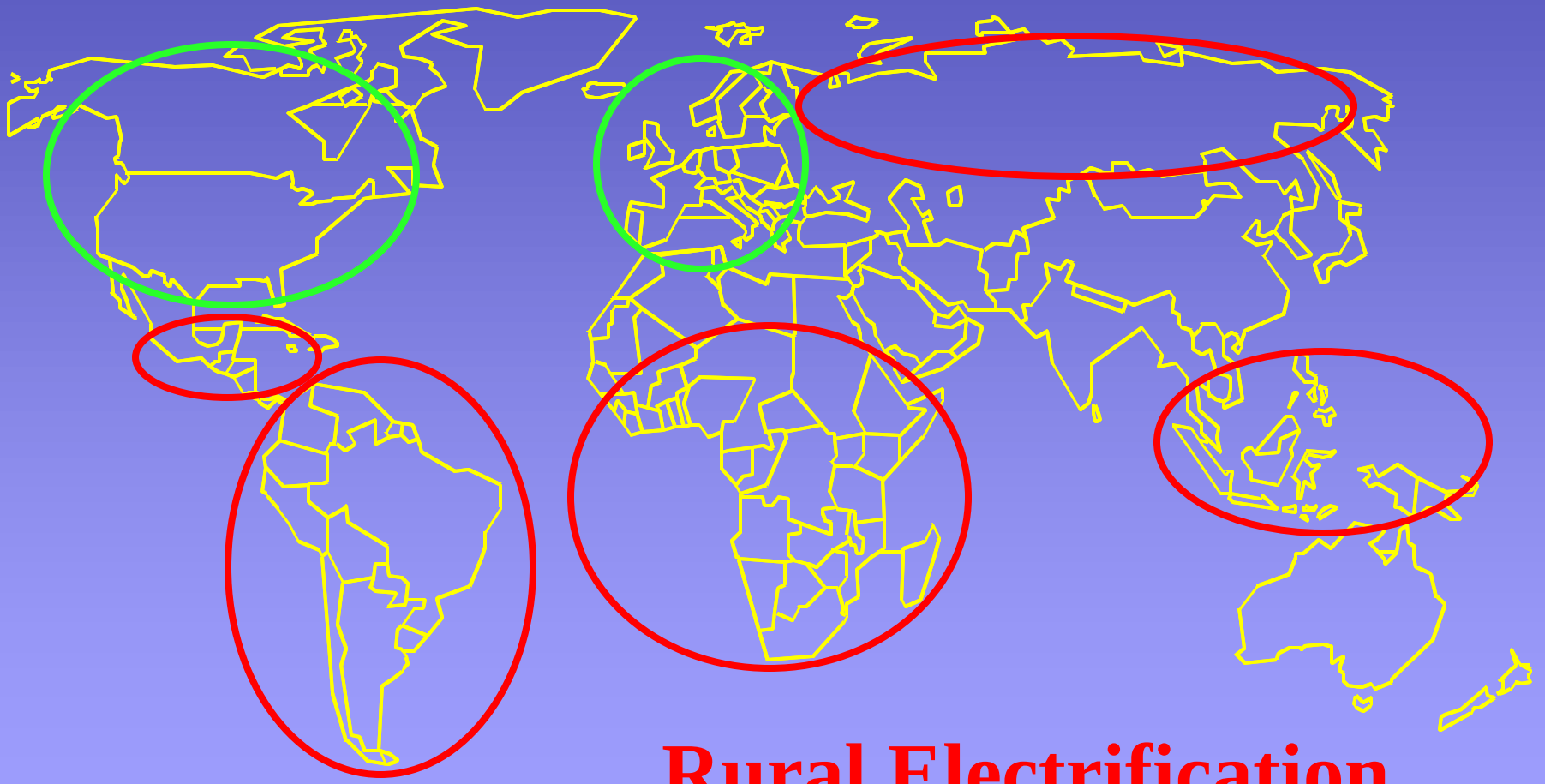
- ✓ Cost-share funding
- ✓ Pilot Projects

California Energy Commission

- ✓ Pilot Projects
- ✓ Cost-share funding

Applications for CPC's BioMax Power Systems

Distributed Generation



Rural Electrification

CPC's New Products Provide Competitive Advantage in $40 Billion Rural Electrification/Distributed Generation Markets

BioMax - Small Modular Biopower System

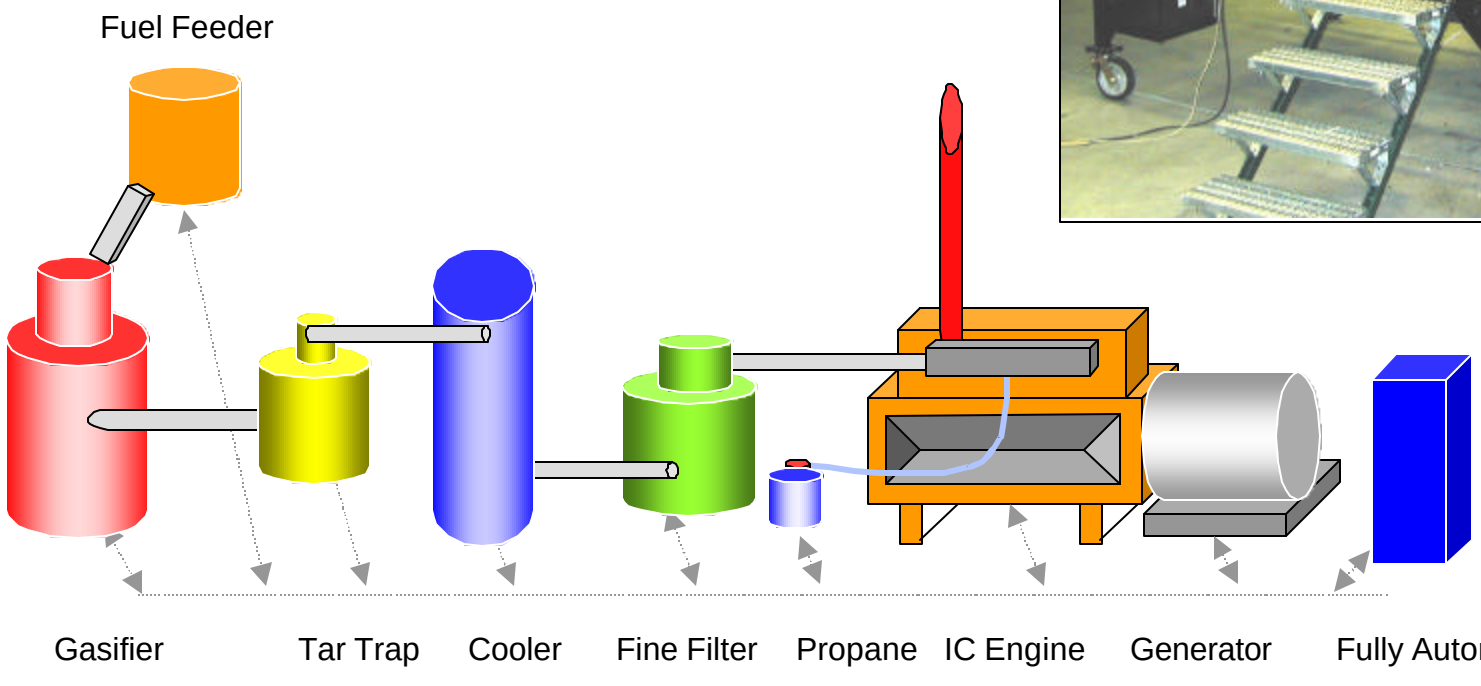
First, fully automated, modular power system to use agricultural or forest residues to produce electricity and heat for off-grid communities or distributed generation applications. No effluents or toxic wastes.

UtiliMeter – Pre-payment Electricity Dispenser

First, microprocessor-based dispenser of electricity (or water, cooking fuel, etc.) that uses RFID smart-chip technology. Designed specifically for the rural energy customer. Guarantees revenue from customers without high overhead costs of meter reading, billing and collection.

CPC's BioMax Power System

(Up to 25 Kilowatts on Biomass)



Features of CPC's Market Driven Design

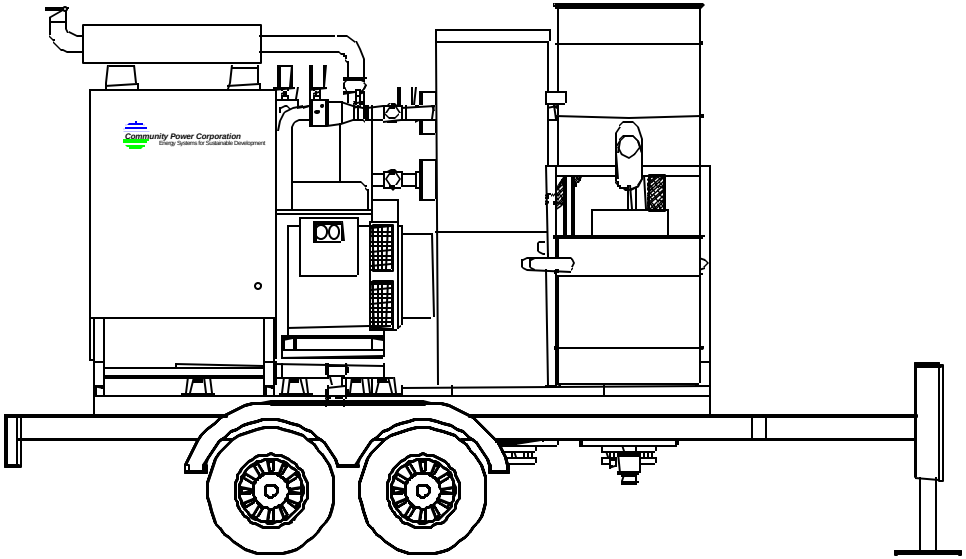
- Power Modules from 5 to 25 kWe
- Non-condensing system
- No liquid effluents or toxic wastes
- Dispatchable power
- "Tar Free" < 50ppm tars in raw gas, < 5ppm tars at engine
- Automatic control for safe & simple "hands off" operation
- Modular, transportable, simple installation
- Low cost <$1,800/kWe (at full commercial status)

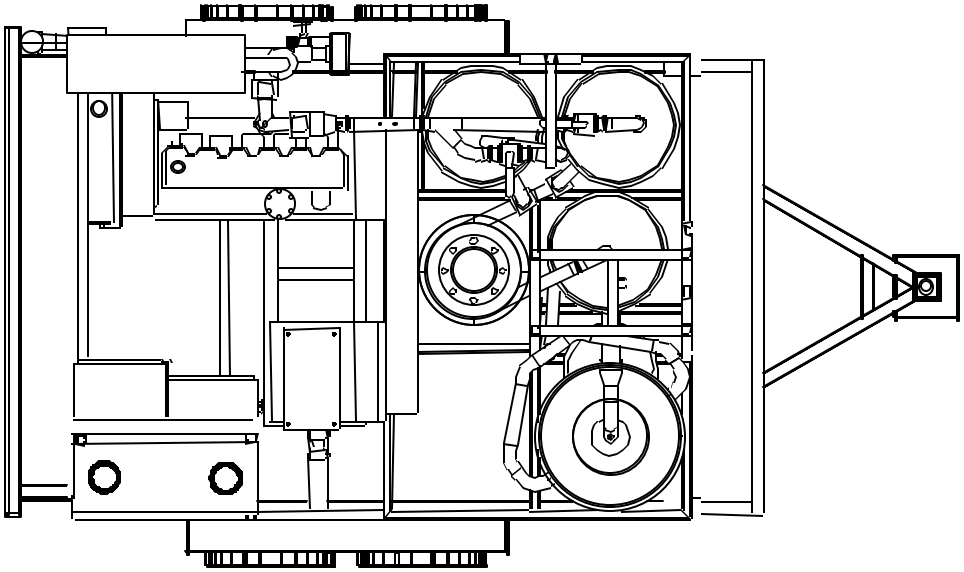
CPC's BioMax System: A Versatile Bioenergy Platform for Different Prime Movers

BioMax Bioenergy Platform

Converts crop and forest residues to a gas capable of operating a variety of power generation technologies

- IC Engines ✓
- Stirling Engines ✓
- Microturbines — Flex Energy & Capstone
- Fuel Cells — USFS





Community Power Corporation

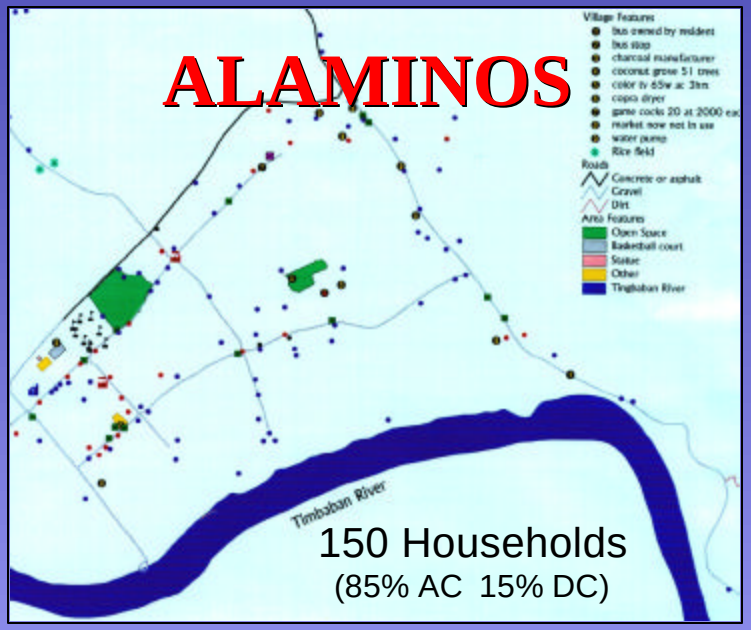
Energy Systems for Sustainable Development

CPC's Universal Bioenergy Platform

- **State-of-the-Art Power Gasifier**
  - -Bio-fuel flexible, modular
  - -No effluents or toxic wastes
  - -Fully automated operation
  - -5 to 25 kWe, CHP capable
  - -Dispatchable
- **Powers Variety of Prime Movers**
  - -IC engines
  - -Stirling engines
  - -Fuel Cells
  - -Microturbines
- **Multiple Applications**
  - -Rural electrification
  - -Distributed generation
  - -Home power
  - -Small industry
- **First of a Kind**

World's First Integrated Rural Energy Services Community
A Pioneering Project by CPC and Shell Renewables

Main Street Alaminos



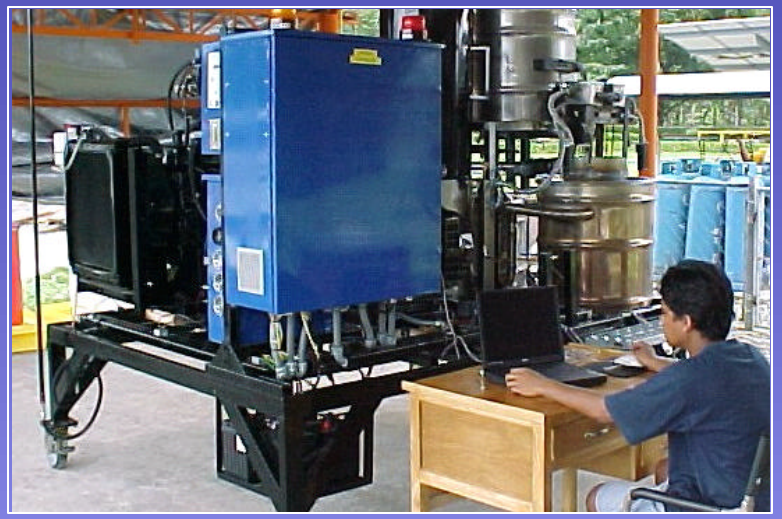
Alaminos Family

BioMax Power System

Typical House

Agreement with Community Leader

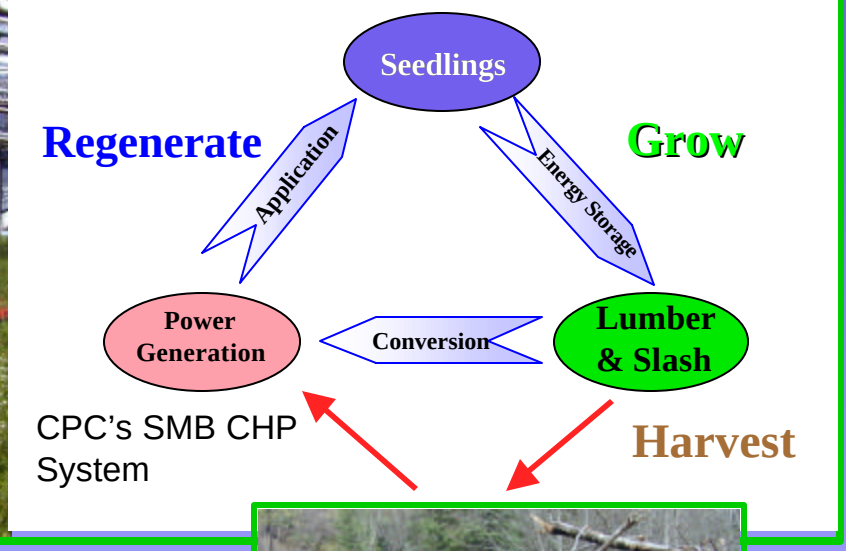
CPC'S Prototype BioMax-15 Installed in Alaminos, Philippines



CPC's BioMax-15 Hoopa Valley, California Combined Heat and Power Distributed Generation Project

Hoopa Indian Forest Regeneration Greenhouse

CPC's Bio-Breeder Application Displaces Propane and PG&E



BioMax-15 will use forest thinnings to generate electricity and heat for Forest Regeneration Complex to support sustainable forestry industry.

Combined Heat and Power From CPC's Small Modular Biopower System At Hoopa Valley

Wood-Gas and Waste Heat To Run Boiler

(Displace Propane)

Electricity to Operate Cold Room

(Displace Grid Electricity)

Project Team

Hoopa Greenhouse Workers

Project Participants

- California Energy Commission
  - co-funding
  - project monitoring
- Community Power Corporation
  - prime contractor
  - small modular biopower system
  - project management
- Hoopa Valley Tribe
  - demonstration site (Tsemeta Forest Regeneration Complex)
  - biomass feedstock
  - SMB system operator
  - project evaluation
  - commercialization
- National Renewable Energy Laboratory
  - co-funding
  - expertise

New Projects: Focused on US Applications

US Forest Service

Demonstrate the BioMax-15 as a distributed generation power system capable of using forest residues to displaced fossil fuels to provide heat and power for rural enterprises and remote communities throughout the United States.

- **Phase 1 – Up to 20 Communities**
- **Phase 2 – Incorporate Microturbines and Solid Oxide Fuel Cells**

Flex Energy & Capstone Turbines

Demonstrate operation of a microturbine on biomass using CPC's power gasifier system.